

# TECHNICAL DATA SHEET

Vapor Permeable Barrier Membrane

## **Typical Physical Properties**

-Color	Graphite	-Water Absorption ASTM D471, modified	5.6%
-Solids Content			
By Weight	63%	-Water Vapor Permeance	
By Volume	53%	ASTM E-96, proc. B @ 40mils nominal wet film	14 perms (800 ng/Pa.m <sup>2</sup> .s)
-Weight	10.7 lbs/gal (1.3 kg/l)		
-Drying Time @50% R.H., +68°F (+20°C), Dry Substrate	2 Hours to touch dry 24 Hours to firm dry	-Air Permeability Testing ASTM E2357, Assembly Air Leakage Testing	Pass
-Service Temperature	-40°F to +180°F (-40°C to +70°C)	ASTM E2178, @ 75Pa	0.0001 cfm/ft <sup>2</sup> (0.0005 L/s.m <sup>2</sup> )
-Application Temperature	+20°F to +122°F (-6°C to +50°C )	-Chemical Resistance	Resists salt solutions, mild acids and alkalis. Non-resistant to oils, grease or
-Tensile Strength ASTM D412	104psi (717 kPa)		solvents
-Elongation, % ASTM D412	420%	-Fire Testing	Complies with NFPA 285 in various wall assemblies
-Low Temperature Flexibility ASTM D1970	Pass @ -30°C	-Flame Spread ASTM E84	10
-Freeze-Thaw Resistance ASTM D2243	Pass, 10 cycles	-Smoke Developed ASTM E84	15
-Nail Sealability ASTM D1970	Pass	-Resistance to Mold, Mildew & Fungal growth ASTM D5590	-0- No Growth
-VOC Content	100 grams/liter, max	A9 I M D9990	

#### **Reference Tests & Standards**

ASTM E2357         ASTM D5590         NFPA 285         Commercial Energy Code           Air Barrier Assembly Test         Mold/Mildew/Fungus Resistant         Ext. Wall Assembly Fire Test         Commercial Energy Code
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## Description

**Air-Bloc**<sup>®</sup> **17** is a liquid applied, elastomeric membrane designed to provide a vapor permeable air & water barrier when applied to above-grade wall assemblies. It is single-component, water-based and cures to a tough monolithic rubber-like membrane, which resists air leakage and water penetration. **Air-Bloc**<sup>®</sup> **17** also includes a Henry antimicrobial technology to create an integral mold resistant membrane, a broad application temperature range and a Henry proprietary fire resistance technology to achieve compliance with stringent NFPA 285 requirements.

## Features

- Low temperature application down to 20°F (-6°C) with no additives required
- Proprietary fire resistant technology provides superior fire performance with ASTM E1354
- · Seamless, vapor permeable elastomeric membrane for above grade walls
- Easy, low cost spray application using simple equipment
- Integral mold resistant formulation
- Excellent adhesion to most construction surfaces such as exterior gypsum boards, CMU, concrete, stone, wood and metal
- Excellent adhesion to most wall construction surfaces can be applied to damp concrete
- Meets highest industry performance standards

## **Product Sizes**

5 gal pails, 55 gal drums

## Uses

**Air-Bloc**<sup>®</sup> **17** is used in construction of high performance wall assemblies requiring vapor permeability in an air & water barrier membrane. Integrated with **Blueskin**<sup>®</sup> and **Air-Bloc**<sup>®</sup> flashings and accessories to form a complete wall system meeting the highest industry performance standards. Commonly used on variety of wall substrates and sheathing prior to installation of exterior cladding.

## Limitations

Must be protected from damage during construction. Do not apply to wet surfaces. Not designed for permanent exposure to weather - protect as soon as possible, however can be exposed up to 3 months if necessary to accommodate construction scheduling.

**Air-Bloc**<sup>®</sup> **17** shall not be applied when ambient (air) and substrate temperatures are below  $20^{\circ}$ F (- $6^{\circ}$ C). The product should not be applied if it is raining, or if the possibility of rain is likely within 16 hours. The product should not be applied if it is expected that the ambient temperature will fall below  $20^{\circ}$ F (- $6^{\circ}$ C) within 48 hours. Following installation of **Air-Bloc**<sup>®</sup> **17** in new building construction, CMU walls where product has been applied must be protected at the roof line to prevent water infiltration into the wall cavity.

In hot weather or direct-sun applications over porous substrates, such as concrete, rapid surface drying can form blisters. A thin 'prime coat' application to substrate, which is allowed to dry, often prevents blister formation in subsequent application. Alternatively a two coat application vs. single heavy coat – with back rolling of base coat – also aids in prevention of blistering in hot weather.

## **Surface Preparation**

All surfaces must be sound, dry, clean and free of frost, oil, grease, dirt, excess mortar or other contaminants. New concrete should be cured for a minimum of 16 hours before **Air-Bloc**<sup>®</sup> **17** is applied. Concrete surfaces should be free of large voids and spalled areas. Joints between panels of exterior grade gypsum, plywood and rigid insulation should be treated as outlined in the table below. Joints wider than ¼" (6mm) between panels of rigid insulation are not permitted. Mortar joints on CMU walls should be struck flush with block surface. Cracks in masonry and concrete up to ½" (12mm) wide shall be filled with a trowel application of **Henry HE925 BES Sealant** or **Air-Bloc**<sup>®</sup> **LF** and allowed to cure overnight prior to application of the liquid membrane to the surface, or alternatively, the cracks may be sealed with a strip of **Blueskin**<sup>®</sup> membrane. Transition joints between two dissimilar asphalt compatible materials at beams, columns, window and door frames, etc., should be sealed with strips of **Blueskin**<sup>®</sup> membrane, lapped a minimum of 3" (75mm) on both substrates. Surfaces to receive **Blueskin**<sup>®</sup> membrane must be prepared per the applicable **Blueskin**<sup>®</sup> Technical Data Sheet. For non-asphalt compatible materials, contact your Henry representative for more information. Mechanical attachment should be made to all window and door frames, or a properly designed sealant joint should be provided.

# Joint & Crack Treatment

Dynamic or expansion joint treatment must be in compliance with projects' architectural details and specifications. **Sheathing or Substrate Non-Moving Joint Treatment Options: Note:** apply per products' published Technical Data Sheets

Non-Moving Joint Width	Method #1 Sealant Method	Method #2 Fluid-Applied Method	Method #3 Self-adhered Sheet Method
Less than 6mm (1/4")	<ol> <li>HE 925 BES Sealant or Air- Bloc<sup>®</sup> LF</li> <li>Fill and strike smooth</li> <li>Allow to dry</li> </ol>	<ol> <li>Fill with Air-Bloc<sup>®</sup> 17 by trowel, extending beyond joint line a minimum 75mm (3") onto face of substrate</li> <li>Fully embed 50mm (2") minimum #183 Yellow glass fiber reinforcing tape into wet Air-Bloc<sup>®</sup> 17 – centered over joint.</li> </ol>	1. Apply Blueskin Adhesive, Blueskin LVC Adhesive or Aquatac 2. Allow to dry 3. Apply self-adhered membrane and roll in place. Select One: Permeable option: • BlueskinVP 160 Non-permeable option: • Blueskin SA • Blueskin SA LT • Blueskin SA HT • Foilskin
6mm (1/4") to 12mm (1/2")	Same As Above	Do Not Use	Same As Above

#### Application

**Air-Bloc**<sup>®</sup> **17** may be applied by brush or roller, however application by conventional air assisted spray equipment in a single or dual-coat application is the preferred method. Apply in continuous, monolithic application without sags, runs or voids, transitioning onto flashing membrane to create a uniform drainage plane and air-barrier. Regularly monitor wet mil thickness during application to assure adequate coverage. The preferred method of application is to mark areas off and ensure that the appropriate volume has been sprayed over this area. During spraying, the material should be applied in horizontal strokes ensuring even application of the product, and then applied in vertical strokes, again ensuring even application. In areas where surface is not uniform, i.e., slightly rough with the presence of small indentations and recesses, an added over-spray should be performed. This over-spray should be sufficient to fill the voids, without excessive material application such that slumping or running of the material occurs.

**Coverage Rates:** Apply per published architectural specifications. Typical application rates include:

- Smooth Surfaces such as exterior gypsum sheathing or formed concrete: 4.25 gal US/ 100 ft<sup>2</sup> (1.7 l/m<sup>2</sup>) to give a wet film thickness of approximately 70 mils (1.75mm), and a nominal cured dry film thickness of 37 mils, depending on texture and porosity of surface
- Rough Surfaces such as CMU: 5.4 gal US / 100ft<sup>2</sup> (2.2 l/m<sup>2</sup>) to give a wet film thickness of approximately 90 mils depending on texture and porosity of surface

**Application Equipment:** Suggested Spray Equipment: Graco President 10:1 pump, Graco Mastic Gun 204-000 with <sup>1</sup>/<sub>4</sub>" (6mm) round tip or similar equipment.

**Protection of Finished Work: Air-Bloc**<sup>®</sup> **17** and **Blueskin**<sup>®</sup> are not designed for permanent exposure. Product is designed to withstand job site exposure for up to 3 months; however, good construction practice calls for covering as soon as possible. Wherever possible, begin covering membrane on south exposures, followed by remainder of surface. In cases where extended exposure periods are expected, use UV resistant **Henry Air-Bloc**<sup>®</sup> **33MR** as an alternate.

## Precautions

When transporting this product, be sure the container is secured and the lid is tight. Do not allow container to tumble as this may loosen the lid and allow leakage to occur. While **Air-Bloc**<sup>®</sup> **17** can be applied down to 20°F (-6°C), it can still freeze below allowed application temperatures. Avoid freezing during storage, application and before material has cured. If **Air-Bloc**<sup>®</sup> **17** should freeze while in storage, move containers to a controlled environment above 32°F (0°C) until thawed and re-mix using a hand operated power mixer prior to use.

## Clean Up

Spray equipment can be flushed out with water. Use mineral spirits to remove dried films.

# Caution

**DO NOT TAKE INTERNALLY!** Close container after each use. Avoid breathing of vapors as it may cause respiratory tract irritation. Use protective measures to avoid contact with eyes and skin. If swallowed, **CALL PHYSICIAN IMMEDIATELY!** In case of eye contact, open eyelids wide and flush immediately with plenty of water for at least 15 minutes. In case of accidental injection by power spray equipment, **GET MEDICAL ATTENTION!** Dispose of container and unused contents in accordance with Local, State and Federal regulations. Do not heat container or store at temperatures greater than 120°F. **KEEP OUT OF REACH OF CHILDREN. FOR EXTERIOR USE ONLY. KEEP FROM FREEZING.** 

**WARNING:** This product contains detectable amounts of chemicals known to the State of California to cause cancer, or birth defects or other reproductive harm.

**Employers** should obtain a copy of the **Material Safety Data Sheet (MSDS)** from your supplier or directly from Henry at the toll free number or website below.

#### **Limited Warranty**

We, the manufacturer, warrant only that this product is free of defects, since many factors which affect the results obtained from this product – such as weather, workmanship, equipment utilized, and prior condition of the substrate – are all beyond our control. We will replace at no charge any product proved to have a material defect within 12-months of purchase, provided it has been applied in accordance with our written directions for uses we recommend as suitable for this product. Proof of purchase must be provided. **DISCLAIMER OF WARRANTIES AND LIMITATION OF LIABILITY:** THIS LIMITED WARRANTY IS IN LIEU OF ANY OTHER WARRANTIES EXPRESS OR IMPLIED INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. MANUFACTURER SHALL HAVE NO LIABILITY OF ANY KIND BEYOND PRODUCT REPLACEMENT, INCLUDING FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES RESULTING FROM ANY DEFECTS OR ANY DELAYS CAUSED BY REPLACEMENT OR OTHERWISE. IF PURCHASER DOES NOT ACCEPT THESE TERMS OF THE LIMITED WARRANTY, PURCHASER MAY RETURN ALL CONTAINERS OR PACKAGES OF PRODUCT PURCHASED FOR A FULL REFUND (PROVIDED THE CONTAINERS OR PACKAGIG IS UNOPENED AND LESS SHIPPING CHARGES IF ANY) WITHIN 30-DAYS OF PURCHASE. RETENTION OF PRODUCT BEYOND 30-DAYS FROM PURCHASE, OR USE OF PRODUCT SHALL CONSTITUTE ACCEPTANCE OF THE LIMITED WARRANTY TERMS, CONDITIONS, AND DISCLAIMERS. THIS LIMITED WARRANTY PROVIDES THE PURCHASER'S EXCLUSIVE REMEDY FOR ANY DEFECT IN THE PRODUCT.

For further details of Henry's product warranty, see our website at www.henry.com/warranty.

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